

REMARKS/ARGUMENTS

Favorable action is requested.

In the replacement Specification herein presented, appropriate editorial changes have been made to sequence identification and Figures for consistency with the Nucleotide Sequence and Amino Acid Sequence Disclosures (37 CFR 1.821-1.825) submitted herewith as advised in the Office Action of May 31, 2006. No new matter has been introduced.

Per Examiner's Comment 4(e) to the Office Action of May 2, 2006, and per Applicant's May 5, 2006 telephone conference with Examiner Lucas, no restatement of the text of canceled Claims 1-111 will be further necessary. Any future amendment to the Claims may identify that this range of Claims as "Claims 1-111 (canceled)".

In the interest of clarity, we have re-typed the entire Specification to incorporate the subject matter added by the Amendments of October 1, 2003, February 13, 2006, April 3, 2006 and May 5, 2006. Nothing is added except for sequence identifying information as set forth in the next paragraph. In the interest of clarity, however, we will now detail the genesis of everything added by Amendment to the October 1, 2003 filing.

The Substitute Specification beginning on page 3 herein is as originally filed on October 1, 2003, with the following revisions:

a) The first paragraph (page 3 above) is amendatory of the first paragraph of the Preliminary Amendment, filed October 1, 2003, concurrently with the filing of the instant patent application.

b) Page 11, last paragraph to page 15, end of second paragraph comes from page 4, line 2 to page 6, line 33 of United States Patent Application Serial No. 616,369, filed November 21, 1990.

c) Page 17, second paragraph through to the end of the first paragraph on page 18 comes from page 6, line 23 through page 7, line 28, United States Patent Application Serial No. 573,643, filed August 27, 1990.

d) Page 68, subheading I entitled "Diagnostic Systems and Methods" to page 112, end of the first full paragraph comes from page 37, line 15 to page 73, line 5 of the August 27, 1990 filing.

e) Page 112, last two paragraphs beginning with "pGEX-2T-CAP-A" to page 114, end of last paragraph comes from page 62, line 9 to page 64, line 35 of the November 21, 1990 filing.

f) Page 115, top of the page through page 118 line 2, comes from the November 21, 1990 filing at page 74, line 16 to page 76, line 12.

g) Page 118, the first full paragraph comes from the November 21, 1990 filing, page 68, line 25 to page 69, line 3.

The file history of United States Patent Application Serial No. 573,643, filed August 27, 1990, is found in Mueth Declaration Exhibit 2. The file history of United States Patent Application Serial No. 616,369, filed November 21, 1990, is found in Mueth Declaration Exhibit 1.

These Sequence Identification Listings filed herewith have been revised in accordance with the formatting and other requirements of the Patent and Trademark Office now in effect, 37 CFR 1.821(c) and (e).

The origins of SEQ ID NOS: 1 to 29 are as set forth in the instant patent application as filed on October 1, 2003.

The origins of SEQ ID NOS: 30 to 71 are as follows:

<u>SEQ ID NO.</u>	<u>USPAS No. 573,643, filed August 27, 1990</u>	<u>USPAS No. 616,369, filed November 21, 1990</u>
30	Figure 1	SEQ ID NO: 1
31	Figure 2	SEQ ID NO: 2
32	p. 50, Table 1	pp. 48-49, SEQ ID NO: 15
33	p. 50, Table 1	Table 1, SEQ ID NO: 16
34	p. 50, Table 1	Table1, SEQ ID NO: 17

<u>SEQ ID NO.</u>	<u>USPAS No. 573,643, filed August 27, 1990</u>	<u>USPAS No. 616,369, filed November 21, 1990</u>
35	p. 50, Table 1	Table 1, SEQ ID NO: 18
36	p. 50, Table 1	Table 1, SEQ ID NO: 19
37	p. 50, Table 1	Table 1, SEQ ID NO: 20
38	p. 50, Table 1	Table 1, SEQ ID NO: 21
39	p. 50, Table 1	Table 1, SEQ ID NO: 22
40	p. 50, Table 1	Table 1, SEQ ID NO: 23
41	p. 58, line 30	p. 56, line 34, SEQ ID NO: 25
42	p. 58, line 32	p. 56, line 36, SEQ ID NO: 24
43	p. 59, line 4	p. 57, line 7, SEQ ID NO: 27
44	p. 59, line 6	p. 57, line 9, SEQ ID NO: 26
45	p. 60, line 1	p. 58, line 3, SEQ ID NO: 29
46	p. 60, line 3	p. 58, line 5, SEQ ID NO: 28
47	p. 60, line 10	p. 58, line 13, SEQ ID NO: 31
48	p. 60, line 12	p. 58, line 15, SEQ ID NO: 30
49	p. 61, line 9	p. 59, line 9, SEQ ID NO: 33
50	p. 61, line 11	p. 59, line 11, SEQ ID NO: 32
51	p. 61, line 18	p. 59, line 18, SEQ ID NO: 35
52	p. 61, line 20	p. 59, line 20, SEQ ID NO: 34
53	p. 62, line 14	p. 60, line 13, SEQ ID NO: 37
54	p. 62, line 16	p. 60, line 15, SEQ ID NO: 36
55	p. 62, line 19	p. 60, line 18, SEQ ID NO: 39
56	p. 62, line 21	p. 60, line 20, SEQ ID NO: 38
57	p. 62, line 27	p. 60, line 26, SEQ ID NO: 41
58	p. 62, line 29	p. 60, line 28, SEQ ID NO: 40

<u>SEQ ID NO.</u>	<u>USPAS No. 573,643,</u> <u>filed August 27, 1990</u>	<u>USPAS No. 616,369,</u> <u>filed November 21, 1990</u>
59	p. 63, line 35	p. 61, line 33, SEQ ID NO: 43
60	p. 64, line 2	p. 61, line 35, SEQ ID NO: 42
61	p. 64, line 8	p. 62, line 6, SEQ ID NO: 45
62	p. 64, line 10	p. 62, line 8, SEQ ID NO: 44
63	-----	p. 62, line 13, SEQ ID NO: 7
64	-----	p. 62, line 14, SEQ ID NO: 8
65	-----	p. 62, line 28, SEQ ID NO: 3
66	-----	p. 63, line 1, SEQ ID NO: 9
67	-----	p. 63, line 2, SEQ ID NO: 10
68	-----	p. 63, line 16, SEQ ID NO: 4
69	-----	p. 64, line 5, SEQ ID NO: 13
70	-----	p. 64, line 5, SEQ ID NO: 14
71	-----	p. 64, line 34, SEQ ID NO: 6

The sequence numbers referring to the Serial No. 616,369, filed November 21, 1990, include sequence numbers added by the Preliminary Amendment filed June 3, 1991 (Paper No. 6 in the file wrapper of Serial No. 616,369, part of File Wrapper United States Patent Application Serial No. 08/272,271, "Exhibit 1 to the Declaration of Joseph E. Mueth") to add such numbers.

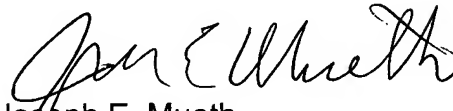
10/677,956

Attorney Docket No. 323-100US-D

An action on the merits is urgently requested.

Date: June 30, 2006

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Joe E. Mueth".

Joseph E. Mueth
Registration No. 20,532

225 South Lake Avenue, 8th Floor
Pasadena, California 91101
Telephone: (626) 584-0396
Facsimile: (626) 584-6862